

What is claimed is:

1. A device for detecting an ambient condition, comprising:
a first sensor to determine the presence of a condition, and provide an alarm signal;
an airflow monitor that monitors airflow level and provides an airflow signal;
and
a processor that provides a status message indicative of the state of the alarm signal and the airflow signal.
2. The device of claim 1, wherein said airflow monitor comprises a thermistor.
3. The device of claim 1, further comprising a second sensor to determine the presence of a second condition and provide a second alarm signal.
4. The device of claim 1, wherein said first sensor is a photoelectric smoke sensor.
5. The device of claim 1, wherein said first sensor is an ionization-type smoke sensor.
6. The device of claim 1, wherein said first sensor is a heat sensor.
7. The device of claim 1, wherein said first sensor is a relative humidity sensor.
8. The device of claim 1, wherein said first sensor is a CO₂ gas sensor.

9. The device of claim 1, wherein the device further comprises an air filter capable of contamination.

10. The device of claim 1, further comprising an airflow sensor to determine airflow through the device and provide an airflow alarm signal.

11. The device of claim 1, wherein said processor compares the monitored airflow level to a low airflow threshold and provides an airflow alarm signal indicative of a low airflow level when the monitored airflow level is lower than the low airflow threshold.

12. The device of claim 11, wherein the low airflow threshold is adjustable.

13. The device of claim 11, wherein said low airflow threshold is substantially equal to ambient airflow.

14. The device of claim 11, further comprising a second sensor to determine the presence of a second condition and provide a second alarm signal.

15. The device of claim 14, wherein at least one of said first and second sensors is adapted for location in a HVAC duct.

16. A detection system for detecting ambient conditions, comprising:
first sensing means for determining the presence of a first ambient condition and for providing a first alarm signal;
airflow monitoring means for monitoring the airflow through said sensing means; and
processing means coupled to said sensing means for providing a status

message.

17. The detection system of claim 16, wherein said sensing means is a photoelectric smoke sensor.

18. The detection system of claim 16, wherein said sensing means is an ionization-type smoke sensor.

19. The detection system of claim 16, wherein said sensing means is adapted for location in a HVAC duct.

20. The detection system of claim 16, further comprising a second sensing means for detecting presence of a second condition.

21. A method of using a device for detecting ambient conditions, comprising:
sensing the presence of an ambient condition and providing an alarm signal;
monitoring an airflow rate through the device;
comparing the airflow rate through the device with a chosen threshold airflow
to provide an airflow signal; and
providing a status message indicative of the state of the alarm signal and the
airflow signal.

22. The method of claim 21, wherein the ambient condition is a smoke condition.